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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Washington, DC 20037-3213

EXAMINER

DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/084,432

Applicant(s)

DE LOYE ET AL.

Examiner

Willie J. Daniel, Jr.

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's communication filed on 17 August 2007. **Claims 1-9** are now pending in the present application. This office action is made **Final**.

Claim Rejections - 35 USC § 112

2. The 112 rejections applied to the claims are withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lu et al.**

(hereinafter Lu) (US 5,99,813) in view of **Chawla et al.** (hereinafter Chawla) (US 6,771,661 B1).

Regarding **claim 1**, Lu discloses a cellular cPBX system (200) which reads on the claimed "wireless corporate communication system" comprising a private branch exchange (cPBX 206), at least one base station (210) coupled with said private branch exchange (206), and a plurality of mobile station units (MS 212) which reads on the claimed "corporate radio terminals" under the range of said base station (210) (see col. 6, lines 42-55; Figs. 3A-4A, 7), wherein

Art Unit: 2617

said private branch exchange (206) comprises means (254, RR - radio resource manager) for controlling the amount of resources allocated to each of said corporate radio terminals (212) (see col. 18, lines 44-60; col. 6, lines 44-55; col. 7, lines 4-10; col. 8, lines 11-24, 41-47; col. 10, lines 1-3; col. 5, lines 16-28; Figs. 3A-4A, 7), where the cPBX allocates resources to mobile stations (212) in the cPBX system (206). Lu further discloses having the feature said base station (BTS 210) (see Fig. 3A), where the BTS provides the resources to the mobile units (212). Lu does not specifically disclose having the feature said base station comprising means for sending a message indicating to said corporate radio terminals the amount of resources they are allocated. However, the examiner maintains that the feature said base station comprising means for sending a message indicating to said corporate radio terminals the amount of resources they are allocated was well known in the art, as taught by Chawla.

In the same field of endeavor, Chawla discloses the feature said base station comprises means for sending (e.g., automatically and dynamically) a allocation information which reads on the claimed "message" indicating to said voice, facsimile, computer terminal (210, 211, 212) which reads on the claimed "corporate radio terminals" the amount of bandwidth which reads on the claimed "resources" they are allocated (see col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-25; col. 13, lines 6-20; Figs. 3-5), where the data communications device (201-1, e.g., PBX) provides bandwidth to the terminals (210) of the communication network (200) in which each terminal is provided with allocation information and the base station and means would be inherent for communicating over a wireless transmission link as evidenced by the fact that one of ordinary skill in the art would clearly recognize (see col. 12, lines 22-25). The system automatically and dynamically

adjusts the amount of bandwidth for communication sessions according to situations such as times or events.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature said base station comprising means for sending a message indicating to said corporate radio terminals the amount of resources they are allocated, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 12, lines 19-32; col. 8, lines 37-46).

Regarding **claim 2**, Lu discloses a private branch exchange adapted to be coupled to a base station (210), said private branch exchange (206) comprising a BSC (208) which reads on the claimed “switch” establishing communications to/from corporate radio terminals (212) located under the range of said base station (210) (see col. 7, lines 4-10; col. 8, lines 11-24,41-47; col. 10, lines 1-3; Figs. 3A-4A, 7), wherein said private branch exchange (206) comprises:

means (254) for controlling the amount of resources allocated to each of said corporate radio terminals (212) (see col. 18, lines 44-60; col. 6, lines 44-55; col. 7, lines 4-10; col. 8, lines 11-24,41-47; col. 10, lines 1-3; col. 5, lines 16-28; Figs. 3A-4A, 7), where the cPBX allocates resources to mobile stations (212) in the cPBX system (206). Lu further discloses having the feature said base station (BTS 210) (see Fig. 3A), where the BTS provides the resources to the mobile units (212). Lu does not specifically disclose having the features means for sending messages to said base station comprising the amount of resources allocated to each of said corporate radio terminal, wherein said base station sends a message

which indicates to each of said corporate radio terminals the amount of resources it is allocated. However, the examiner maintains that the feature means for sending messages to said base station comprising the amount of resources allocated to each of said corporate radio terminal, wherein said base station sends a message which indicates to each of said corporate radio terminals the amount of resources it is allocated was well known in the art, as taught by Chawla.

Chawla further discloses the features

means for sending allocation information which reads on the claimed “messages” to said base station comprising the amount of resources (bandwidth) allocated to each of said corporate radio terminal (210) (see col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-25; col. 13, lines 6-20; Figs. 3-5, 7 “ref. 500”), where the data communications device (201-1, e.g., PBX) provides bandwidth to the terminals (210) according to the bandwidth information (e.g., event, times, topology changes, or occurrences) in which the base station and means would be inherent for communicating over a wireless transmission link,

wherein said base station sends (e.g., automatically and dynamically) a message which indicates to each of said corporate radio terminals (210) the amount of resources it (210) is allocated (see col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-25; col. 13, lines 6-20; Figs. 3-5), where the data communications device (201-1, e.g., PBX) provides bandwidth to the terminals (210) of the communication network (200) in which each terminal is provided with allocation information and the base station would be inherent for communicating over a wireless transmission link as evidenced by the fact that one of

ordinary skill in the art would clearly recognize (see col. 12, lines 22-25). The system automatically and dynamically adjusts the amount of bandwidth for communication sessions according to situations such as times or events.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature means for sending messages to said base station comprising the amount of resources allocated to each of said corporate radio terminal, wherein said base station sends a message which indicates to each of said corporate radio terminals the amount of resources it is allocated, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 12, lines 19-32; col. 8, lines 37-46).

Regarding **claim 3**, Lu discloses a private branch exchange (206) according to claim 2, further comprising a registry (252) which reads on the claimed "database" storing user profiles of said corporate radio terminals (212) (see col. 7, line 59 - col. 8, line 10; col. 9, lines 8-13; col. 27, lines 34-45; Figs. 3A-4A, 7, 13A), where the HLR/VLR registry (database) maintain information of the user for providing services in which the profile would be obvious. Lu does not specifically disclose having the feature said amount of resources allocated to a corporate radio terminal depending on the profile of said corporate radio terminal stored in said database. However, the examiner maintains that the feature said amount of resources allocated to a corporate radio terminal depending on the profile of said corporate radio terminal stored in said database was well known in the art, as taught by Chawla.

Chawla further discloses the feature said amount of resources (bandwidth) allocated to a corporate radio terminal (210) depending on the profile of said corporate radio terminal (210) stored in said network policy resource allocation table (400) which reads on the claimed "database" (see col. 13, line 7 - col. 14, line 58; col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-25; Figs. 3-5, 6 "ref. 400", 7), where the data communications device (201-1, e.g., PBX) has a table (400) for indicating the resources to be allocated to the terminals (210) such as during a typical twenty-four hour period in which the profile would be inherent for providing an individual terminal with resources.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature said amount of resources allocated to a corporate radio terminal depending on the profile of said corporate radio terminal stored in said database, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 8, lines 37-46).

Regarding **claim 4**, Lu discloses a cPBX system (200) (see Figs. 3A-4A, 7), where the system (200) is connected to a public network (202). Lu does not specifically disclose having the feature wherein said amount of resources allocated to a corporate radio terminal communicating with a public communication network over said corporate communication system depends on the effective amount of data destined to said corporate radio terminal and received at the interface between said corporate communication system and said public communication network. However, the examiner maintains that the feature wherein said amount of resources allocated to a corporate radio terminal communicating with a public

communication network over said corporate communication system depends on the effective amount of data destined to said corporate radio terminal and received at the interface between said corporate communication system and said public communication network was well known in the art, as taught by Chawla.

Chawla further discloses the feature wherein said amount of resources allocated to a corporate radio terminal (210) communicating with a public communication network (e.g., Internet, extranets, or WAN's) over said corporate communication system (200) depends on the effective amount of data destined to said corporate radio terminal (210) and received at the interface between said corporate communication system (200) and said public communication network (e.g., Internet, extranets, or WAN's) (see col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-32; Figs. 3-5, 7), where the data communications device (201-1, e.g., PBX) provides resources to be allocated to the terminals (210) for communicating with connected networks.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature wherein said amount of resources allocated to a corporate radio terminal communicating with a public communication network over said corporate communication system depends on the effective amount of data destined to said corporate radio terminal and received at the interface between said corporate communication system and said public communication network, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 8, lines 37-46).

Regarding **claim 5**, the combination of Lu and Chawla discloses every limitation claimed, as applied above (see claim 2), in addition Lu further discloses a private branch exchange (206) according to claim 2, wherein said amount of resources allocated to a corporate radio terminal (212) depends on the amount of traffic in said private branch exchange (206) (see col. 8, lines 11-24, 41-47; col. 18, lines 44-60; Figs. 3A-4A, 7).

Regarding **claim 6**, Lu discloses every limitation claimed as applied above in claim 2. Lu does not specifically disclose having the feature wherein said amount of resources allocated to a corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal. However, the examiner maintains that the feature wherein said amount of resources allocated to a corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal was well known in the art, as taught by Chawla.

Chawla further discloses the feature wherein said amount of resources allocated to a corporate radio terminal (210) is dynamically updated during a communication to/from said corporate radio terminal (210) (see col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-25, 33-57; Figs. 3-5, 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature wherein said amount of resources allocated to a corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 8, lines 37-46).

Regarding **claim 7**, Lu discloses a base station (210) adapted to be coupled to a private branch exchange (206) comprising a TRX module (530) which reads on the claimed “module” for sending data which reads on the claimed “messages” to corporate radio terminals (212) under the range of said base station (210) (see col. 19, lines 34-38,61; col. 20, lines 1-27; Figs. 3A-4A, 7-9). Lu further discloses having the feature said base station (BTS 210) (see Fig. 3A), where the BTS provides the resources to the mobile units (212). Lu does not specifically disclose having the feature indicating the amount of resources each of said corporate radio terminal is allocated, said amount of resources being determined by said private branch exchange. However, the examiner maintains that the feature indicating the amount of resources each of said corporate radio terminal is allocated, said amount of resources being determined by said private branch exchange was well known in the art, as taught by Chawla.

Chawla further discloses the feature indicating the amount of resources each of said corporate radio terminal (210) is allocated, said amount of resources being determined by said private branch exchange (201-1) (see col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-25; col. 13, lines 6-20; Figs. 3-5, 7), where the system automatically and dynamically adjusts the amount of bandwidth for communication sessions according to situations such as times or events in which each terminal is provided with allocation information (or message).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature indicating the amount of resources each of said corporate radio terminal is allocated, said

Art Unit: 2617

amount of resources being determined by said private branch exchange, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 8, lines 37-46).

Regarding **claim 8**, Lu discloses every limitation claimed as applied above in claim 1. Lu does not specifically disclose having the feature wherein said amount of resources allocated to each of said corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal. However, the examiner maintains that the feature wherein said amount of resources allocated to each of said corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal was well known in the art, as taught by Chawla.

Chawla further discloses the feature wherein said amount of resources allocated to each of said corporate radio terminal (210) is dynamically updated during a communication to/from said corporate radio terminal (210) (see col. 10, line 65 - col. 11, line 34; col. 11, lines 47-62; col. 12, lines 6-25, 33-57; Figs. 3-5, 7), where the resources is dynamically adjusted for the terminals, for example, during times of day for business cycle.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature wherein said amount of resources allocated to each of said corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 12, lines 19-32; col. 8, lines 37-46).

Regarding **claim 9**, Lu discloses every limitation claimed as applied above in claim 7. Lu does not specifically disclose having the feature wherein said amount of resources is dynamically updated during a communication to/from said corporate radio terminal. However, the examiner maintains that the feature wherein said amount of resources is dynamically updated during a communication to/from said corporate radio terminal was well known in the art, as taught by Chawla.

Chawla further discloses the feature wherein said amount of resources is dynamically updated during a communication to/from said corporate radio terminal (210) (see col. 10, line 65 - col. 11, line 34; col. 11, lines 47-62; col. 12, lines 6-25,33-57; Figs. 3-5, 7), where the amount of resources is dynamically adjusted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lu and Chawla to have the feature wherein said amount of resources allocated is dynamically updated during a communication to/from said corporate radio terminal, in order to allow data communication devices to automatically and dynamically adjust bandwidth, as taught by Chawla (see col. 12, lines 19-32; col. 8, lines 37-46).

Response to Arguments

4. Applicant's arguments filed 17 August 2007 have been fully considered but they are not persuasive.

The Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support and to further clarify (see the above claims and comments in this section).

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

6. Regarding applicant's argument of claim 1 on pg. 7, 2nd full paragraph, "...none...teach...sending allocation information to any of the voice, facsimile, or computer terminals...", the Examiner respectfully disagrees. Applicant has failed to appreciate the combined teachings of well-known prior art Lu and Chawla that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. In particular, Lu discloses the feature(s) said private branch exchange (206) comprises means (254, RR - radio resource manager) for controlling the amount of resources allocated to each of said corporate radio terminals (212) (see col. 18, lines 44-60; col. 6, lines 44-55; col. 7, lines 4-10; col. 8, lines 11-24, 41-47; col. 10, lines 1-3; col. 5, lines 16-28; Figs. 3A-4A, 7), where the cPBX allocates resources to mobile stations (212) in the cPBX system (206). Lu further discloses having the feature said base station (BTS 210) (see Fig. 3A), where the BTS provides the resources to the mobile units (212). As further support in the same field of endeavor, Chawla

discloses the feature(s) said base station comprises means for continuously (e.g., automatically and dynamically) sending a allocation information which reads on the claimed "message" indicating to said voice, facsimile, computer terminal (210, 211, 212) which reads on the claimed "corporate radio terminals" the amount of bandwidth which reads on the claimed "resources" they are allocated (see col. 10, line 65 - col. 11, line 34; col. 11, lines 55-62; col. 12, lines 6-25; col. 13, lines 6-20; Figs. 3-5), where the data communications device (201-1, e.g., PBX) provides bandwidth to the terminals (210) of the communication network (200) in which each terminal is provided with allocation information and the base station and means would be inherent for communicating over a wireless transmission link as evidenced by the fact that one of ordinary skill in the art would clearly recognize (see col. 12, lines 22-25). Chawla further discloses computer terminal (215) performs high speed backup in which 4 Mbps must be allocated for a particular period and 2 Mbps for another period (see col. 13, lines 28-42), where the computer terminal (215) must know how much bandwidth is allocated in order to perform backup. In addition, for example, a computer terminal(s) communicating internet traffic typically has a modem in which there is a meter indicating transmission parameters such as data and/or baud rate. Another example, a communication terminal attempting to access a traffic channel can receive a busy signal which corresponds to no resources available. The system automatically and dynamically adjusts the amount of bandwidth for communication sessions according to situations such as times or events. Therefore, the combination(s) of the reference(s) Lu and Chawla as addressed above more than adequately meets the claim limitations.

Art Unit: 2617

7. Regarding applicant's argument(s) of claims 2-9, the claims are addressed for the same reasons as set forth above and as applied above in each claim rejection.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 2617

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,JR/

WJD,JR
29 October 2007


CHARLES N. APPIAH
SUPERVISORY PATENT EXAMINER